# ADVENTURE HD+WiFi

Please read through this user manual before using the product and keep the manual for future reference. Product appearance and/or specifications are subject to change without notice. Before using this camera, please insert a micro SD card (class 10 card, no larger than 32GB) into the Sports camera (WASPcam 5210) . Camera functions will not work without a micro SD card inserted into the camera. Please note the camera **does not include** a micro SD card inside the package, the micro SD card must be **purchased separately**.

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## Preface

This product is an action-sports camera tailored to meet the demands of today's active lifestyles! This action camera is perfect for vehicle data recording, photography, outdoor sports, home security, and watersports. It allows you to film anytime, anywhere.

## Manual Disclaimer

Every effort has been made to ensure that the contents of this manual are correct and up to date. However, no guarantee is made regarding the accuracy of the contents. The manufacturer reserves the right to change the manual contents and product specifications without notice.

## Safety Precautions

- Do not store the product in dusty, dirty, or sandy areas, as its internal components may be damaged.
- Do not store the product in hot areas. High temperatures can shorten the life of electronic devices, damage batteries and warp or melt certain plastics.
- Do not store the product in cold areas. When the product warms up to its normal temperature, moisture can form inside, which may damage the electronic circuits.
- Do not attempt to open the casing or attempt your own repairs. High-voltage internal components create the risk of electric shock when exposed.
- Do not drop or knock the product. Rough handling may damage the internal components.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the product. Wipe the product with a slightly damp soft cloth.
- Do not open the battery cover while an image is being recorded. Doing so will not only make storage of the current image impossible, it can also corrupt other image data already stored on the SD card.

- If the product or any of its accessories are not working properly, please contact Cobra Electronics at (773) 889-3087. Our staff will assist you and if necessary, arrange for the product to be repaired or replaced.
- Test for proper operation before using the camera.
- Cobra Electronics is not responsible for any collisions, damage or personal injuries resulting from the use of the Adventure HD Action Camera.
- Cobra Electronics is not responsible for any legal repercussions from use of the Adventure HD Action Camera or from the sharing of footage.

Cobra Electronics is not responsible for any property damage or lost/stolen Adventure HD Action Cameras.

## System Requirements

The camera requires a computer with the following minimum specifications for full HD video playback:

- Windows® 7 / MAC OS X 10.8
- Intel® Core Duo™ / AMD Dual-Core CPU
- 2 GB of RAM
- DirectX 9 compatible graphics solution
- Available hard disk space

The camera requires a computer with the following minimum specifications for WVGA/VGA video playback:

- Windows® Vista / MAC OS X 10.5
- Intel® / AMD Dual-Core CPU
- 1 GB of RAM
- DirectX 9 compatible graphics solution
- Available hard disk space

Minimum requirements for connecting the camera to a PC or Mac:

- Standard USB 2.0 port

## Features

The camera and its included accessories offer a variety of features and functions including:

- A water-resistant case that allows you to film underwater up to 30 meters
- Built-in Wi-Fi: Connects camera to Smartphones via Adventure HD App
- High definition screen that displays and plays back recorded videos
- Removable battery that is easy to replace with a spare to prolong the recording time of the camera
- Video recording while charging
- Video recording while battery powered
- HD wide-angle lens
- HDMI output
- Web camera
- Supports memory cards up to 32GB maximum storage space, class 10
- Multiple video recording formats: 1080P (interpolated) / 720P / WVGA
- Records video in .AVI format
- Multiple photo shooting modes: Single shot, Burst, and Continuous Shooting (Time-lapse)
- Compact size

## Camera Function Quick Guide Diagram

Battery Cover
Battery Lock

OK Button
Waterproof Case Switch
Up / Wi-Fi Button
Down Button
Lens
Power/Mode Button

## Accessories

The following items are included in the camera package. If any items are missing or damaged, contact Cobra immediately.

- Waterproof Camera Casing
- Adventure HD Camera
- Camera Holder
- Straight Joint Mounts x3
- J-Hook Buckle Mount
- Tripod Mount
- Basic Buckle Mount
- Tripod Mount Adapter
- Flat / Curved Adhesive Mounts
- Velcro Straps x3
- Micro USB Charging Cable
- Cleaning Cloth
- Adventure HD 5210 Instruction Manual
- Zip Ties x4 / 3M Stickers x2

## Button Primary Functions

| Button | Function |
|---|---|
| Power / Mode Button | Turn the camera on & off.<br><br>Change between Video mode, Photo mode, Playback mode, and settings menu. |
| OK Button<br>**OK** | Enter and confirm settings in the settings menu. |
| Up Button | Scroll up through the settings.<br><br>Scroll through videos/photos in playback mode.<br><br>Press to enter Wi-Fi mode |
| Down Button | Scroll down through the settings.<br><br>Scroll through videos/photos in playback mode. |

## Basic Camera Functions

### Installing the Micro SD Card

To insert the SD card

- Find the Micro SD card slot
- Insert the card into the slot (make sure the card is facing the correct way)
- Push the card into the slot until it clicks

****Note – Please use a minimum speed Class 10 card, maximum 32GB storage capacity. Cobra recommends a name brand card such as Lexar®, SanDisk®, Kingston® or Gigastone.**

Follow these steps in reverse order to remove the SD card

**Note - Please ensure that the SD Card is inserted in the correct direction or you may damage the SD card and/or SD card reader.

## Battery

- Use only the type of battery that came with the camera. Using any other type of battery may damage the equipment and invalidate the warranty.
- Do not short the battery terminals. The battery could overheat.
- Do not attempt to split or peel the outer casing.
- Remove the battery if the camera is not going to be used for a long time. If the battery is left unused for more than 3 months, charge the battery before use.

1. Installing and Removing Batteries
   a. Press on battery cap to open it
   b. Correctly install the battery into the camera as directed by the +/- symbols
   c. Remove Battery: Open the battery cap to take the battery out

2. Charging
    a. Charging can be done by either connecting the camera to a computer or USB power adapter
    b. Charge the camera in a vehicle by connecting it to a USB car charger
    c. The camera can record video while charging
    d. The camera will charge even when it's powered off

## Switching Camera On and Off

- Press and hold the Power / Mode button for 3 seconds to turn it on/off

## Switching Modes & Changing Settings

Switch between video recording, photo, & playback modes and the settings menu by pressing the Power / Mode button. An icon in the upper left of the screen will show the current mode.

In the settings menu choose a setting with the Up/Down buttons and select with the OK button. Press the Power / Mode button to exit the settings menu.

## Camera Modes

### Video Recording Mode

Press OK to start recording. A record icon in the upper left corner will start to flash. Press OK again to stop recording. The record icon will disappear.

Video Recording Notes:

**Resolution:** Higher resolutions result in larger video files.

**Loop Recording:** When loop recording is turned on video files will be at the specified length. When the SD card is full the oldest file(s) will be deleted automatically so new files can be recorded.

**Exposure:** In very bright environments set the Exposure Value (EV) as a positive number. For very dark environments set the EV to a negative

number. The larger the value the greater the exposure value is compensated.

**Motion Detection:** If motion detection is turned on, the camera will only begin recording if it detects any movement. If the camera is moved or if there is movement in the camera's field of view, the camera will record a short segment and stop recording once the movement has stopped.

## Photo Mode

Press OK to take photos.

Photo Notes:

**Exposure:** In very bright environments set the Exposure Value (EV) as a positive number. For very dark environments set the EV to a negative number. The larger the value the greater the exposure value is compensated.

**Quick Review:** After taking a photo the photo will be displayed on the screen for the selected number of seconds.

**Date/Time:** Sets the watermark for photos

## Video Playback Mode

Press Up/Down to scroll through the files on the SD card
Press OK to playback a video file
During playback press Up/Down to adjust the volume

The Playback Mode menu allows files to be Deleted or Protected. Protected files are not deleted from the SD card as a result of loop recording or the Delete All function.

## Settings Menu

(default setting in **bold**)

Press Up/Down buttons to scroll through the settings and select with the OK button. Press the Mode button to go back and to exit the menu.

| MENU OPTION | SETTINGS |
|---|---|
| Video Resolution | **1080FHD 1920x1080 (interpolated)** / 1080P 1440X1080 (interpolated) / 720P 1280X720 / WVGA 848X480 / VGA 640X480 |
| Photo Resolution | **12M 4082x3024** / 10M 3648x2736 / 8M 3264x2448 / 5M 2592x1944 / 3M 2048x1586 / 2M HD 1920x1080 / 1.3M 1280x960 / VGA 640x480 |
| Burst | **Off** / 3 Pictures / 5 Pictures (camera will take the selected number of pictures in sequence) |
| Exposure | +2.0 / +5/3 / +4/3 / +1.0 / +2/3 / +1/3 / **+0.0** / -1/3 / -2/3 / -1.0 / -4/3 / -5/3 / -2.0 (used to adjust the amount of light let into the camera sensor, use positive setting in bright conditions and negative setting in dark conditions) |
| Motion Detection | **Off** / On |
| Looping | **Off** / 1 Minute / 2 Minutes / 3 Minutes / 5 Minutes / 10 Minutes |
| Time-lapse | **Off** / 1 Second / 2 Seconds / 5 Seconds / 10 Seconds / 30 Seconds / 60 Seconds (Takes a photo based on the selected time increment.) |
| WDR (Wide Dynamic Range) | **Off** / On (Wide Dynamic Range: imaging is a method used to produce images that try to recreate the full scene content in scenes that have a dynamic range that cannot be captured by standard cameras in one image. |
| Record Audio | Off / **On** |
| Date Stamp | Off / **On** |
| Quality | Fine / **Normal** / Economy (Adjusts the overall quality of the image. Use Fine for images that |

| | |
|---|---|
| | are more clear, use Economy for lower quality images that take up less storage space) |
| Sharpness | Strong / **Normal** / Soft (Adjusts the sharpness of the photos pixels. Use strong take make the pixels appear sharp, use soft to make the pixels appear more soft and blended together) |
| ISO | **Auto** / 100 / 200 (The higher the ISO, the more sensitive the camera sensor becomes to light. Use a higher ISO in darker conditions to make the footage/images appear brighter) |
| Anti-Shaking | **Off** / On (Helps to smooth footage and remove excessive shaking) |
| White Balance | **Auto** / Daylight / Cloudy / Tungsten / Fluorescent (Helps balance color in certain lighting to make footage/images look more natural) |
| Frequency | **50Hz** / 60Hz (Changing the frequency to match with the electrical frequency of your environment will prevent your video from flickering) |
| Screen Icons | Off / **On** (When turned off, icons will not appear on the LCD screen) |
| Screen Saver | **Off** / 3 Minutes / 5 Minutes / 10 Minutes |
| Image Rotation | **Off** / On (Rotates the image 180°) |
| Auto Power Off | **Off /** 1 Minute / 3 Minutes |
| Language | **English**, French, German, Dutch, Portuguese, Spanish, Italian, Simplified Chinese, Traditional Chinese, Japanese, Russian, Korean |
| Beep Sound | Off / **On** |
| Date/Time | Allows users to set the current date and time |

| | |
|---|---|
| TV Out | **Off** / On (Connect the camera to a TV using a video cable and set this to On to view files on a TV without HDMI) |
| TV Mode | **NTSC** / PAL (There are two television display systems in commercial use: PAL (common in Europe and parts of Asia) delivers a frame rate of 25 fps (frames per second) with 625 lines, while NTSC (used in the U.S. and Canada) delivers a frame rate of 30 fps using 525 lines. Adjust this setting based on your TV to view files correctly on your TV) |
| Auto Rotate | **Off** / On (The image on the LCD screen will always appear right-side up, no matter which way you move the camera.) |
| WIFI SSID | Shows Wi-Fi network name |
| WIFI Password | Shows Wi-Fi network password |
| Delete | Delete Current (deletes most recent file) / Delete All (deletes all files on the microSD card) |
| Format SD Card | **Cancel** / OK (formats the SD card and erases all data from the SD card) |
| Default Setting | **Cancel** / OK (Resets all settings to the default values) |
| Version | Displays camera's current version (YYYYMMDD VX.X) |

Auto Power Off turns the camera off after a period of inactivity
Format will format the SD card and erase all data from the SD card

# Downloading the Adventure HD App

## Download from iTunes

| | |
|---|---|
| | Click iTunes icon to open iTunes |
| | Click iTunes Store Icon to open the iTunes Store |
| | Enter "Adventure HD App" into the search bar<br>Click download under the Adventure HD App Icon |
| | Once it's finished the Adventure HD App icon will show on your home screen |

## Download by iPhone

| | |
|---|---|
| | Click the App Store icon |
| | Click search icon |
| Adventure HD App | Click the search field and enter Adventure HD App, click the search button |
| | Click the icon and click download |
| | Once it's finished the Adventure HD App icon will show on your home screen |

## Android Smartphone

| | |
|---|---|
| Open the Google Play Store on your phone | |
| Enter "Adventure HD App" into the search bar and hit search | |
| | Click on the Adventure HD App icon to view the app page |
| Click the install button to install the Adventure HD App to your phone | |
| | Once it's finished, the Adventure HD App will appear in your application menu. |

## Using the Wi-Fi

To enter the camera's Wi-Fi interface, press and hold the OK button. The camera's LCD screen will change to a Wi-Fi symbol. Once the Wi-Fi has initialized on the camera, the LCD screen will show the network name (ssid) and password (pwd) required to connect a Smartphone to the Wi-Fi.

Step 1: Initialize the Wi-Fi on the camera
Step 2: On a Smartphone, enter the Wi-Fi settings
Step 3: Connect the Smartphone to the Adventure HD camera's Wi-Fi network (network name is displayed on the camera's LCD screen)
Step 4: Enter the password displayed on the cameras LCD screen
Step 5: Wait for the Smartphone to connect to the camera's Wi-Fi
Step 6: Once Wi-Fi is connected, open the Adventure HD App. The app will connect the Smartphone to the Adventure HD camera
Step 7: Once the connection is successful, the Smartphone will display what the camera sees on the screen
Step 8: The camera photo/video recording can now be controlled from the Smartphone

## Screen Icons

### Video Mode Screen Icons

| Icon | Description |
|---|---|
| | Indicates that the camera is currently in video mode. |
| | Displays current battery life. |
| | Indicates that the camera is currently charging. |
| 2015/02/12 | Displays the date stamp that appears on the footage. |
| 01:32:05 | Displays the time stamp that will appear on the footage. |

| | |
|---|---|
| | Displays the current exposure value (EV) setting. |
| | Indicates that a MicroSD card needs to be inserted into the camera. |
| | Indicates that loop recording is turned on. Also indicates the video duration for each recording. |
| | Indicates “Record Audio” is turned on. |
| | Indicates “Record Audio” is turned off. |
| | Indicates that a MicroSD card has been inserted into the camera. |
| 01:32:05 | Displays the amount of recording time that is available on the SD card. |
| 1080FHD | Displays the video resolution the camera is filming in. |

## Photo Mode Screen Icons

| Icon | Description |
|---|---|
| | Indicates that the camera is currently in photo mode. |
| | Displays the current ISO setting of the camera. |
| | Indicates that auto white balance is on. |
| | Indicates that daylight white balance is on. |
| | Indicates that cloudy white balance is on. |
| | Indicates that tungsten white balance is on. |
| | Indicates that fluorescent white balance is on. |

| | |
|---|---|
| | Indicates that the anti-shake function is turned on. |
| | Displays current battery life. |
| | Indicates that the camera is currently charging. |
| | Displays the current exposure value (EV) setting. |
| | Indicates that the photo quality is set to “Economy”. |
| | Indicates that the photo quality is set to “Normal”. |
| | Indicates that the photo quality is set to “Fine”. |
| INT | Indicates that a MicroSD card needs to be inserted into the camera. |
| 8M | Displays the photo resolution the camera is shooting in. |
| 00001 | Displays the total number of photos that can be taken at the selected resolution. |
| | Indicates that a MicroSD card has been inserted into the camera. |
| | Indicates that the camera is in burst mode. |

## Review Mode Screen Icons

| | |
|---|---|
| | Indicates that the camera is in review mode. |
| | Displays current battery life. |
| | Indicates that the camera is currently charging. |
| 2014:12:22 | Date stamp on footage. |

| | |
|---|---|
| 2015/02/22 | Date stamp on photos. |
| MOV10001.avi | File name of video. |
| PICT0002.jpg | File name of photo. |
| OK: ▶ | Press OK button for video playback. Displayed when reviewing a video file. |
| 8M | Displays the photo resolution the camera is shooting in. |
| ▶ | Indicates photo playback. |
| 03 48 06 | Time stamp on video footage. |
| 03 48 33 | Time stamp on photos. |
| 1080FHD | Resolution of the video clip. |

## Connecting to External Devices

### Playback on HD TV

Turn the camera on, connect the HDMI port in the camera to the TV via an HDMI cable (not included) and choose HDMI mode on the TV. The LCD screen on the camera will turn off automatically and now all operations and functions can be seen on the TV.

## Technical Specifications

| | |
|---|---|
| Screen | 1.5inch LCD Screen |
| Lens | 150°A + wide-angle lens |
| Language Options | English / German / French / Spanish / Dutch / Korean / Italian / Portuguese / Chinese Traditional / Chinese Simplified / Japanese / Russian |
| Video Resolution | 1920*1080/30fps (interpolated)<br>1440*1080/30fps (interpolated)<br>1280*720/30fps<br>848*480/30fps<br>640*480/30fps |
| Video Format | AVI |
| Compressed Format of Videos | MJPEG |
| Resolution of Photos | 12M/10M/8M/5M/3M |
| Storage | MicroSD (Class 10 – max 32GB) |
| Shooting Modes | Single Shot / Self-timer (2s / 5s / 10s )<br>Continuous shooting (Time-lapse) |
| Frequency | 50Hz / 60Hz |
| USB Interface | USB 2.0 |
| Power Source Interface | 5V |
| Battery Capacity | 900mAh |
| Power Dissipation | 260mA@4.2V |
| Recording Time | 1080P / About 70 minutes |
| Charging Time | About 3 hours |
| Dimensions | 29.8x59.2x41mm |

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**FCC Statement**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.
These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions (1)this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation
SAR Max. Values: 1.30W/Kg(1g) for Body-worn

## IC Statement

This device complies with Industry Canada’s licence-exempt RSSs. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

The term “IC: “ before the certification/registration number only signifies that the Industry Canada technical specifications were met. This product meets the applicable Industry Canada technical specifications.

Le présent appareil est conforme aux CNR d'Industrie Canada applicable aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage,
et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement